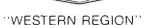
# ASH GROVE CEMENT COMPANY



June 16, 1998

Mr. Fred Austin Puget Sound Air Pollution Control Agency 110 Union Street, Suite 500 Seattle Washington 98101-2038

Re: Notice of Construction No. 7381

Dear Mr. Austin;

Thank you for the draft of permit No 7381. In review, the below comments are submitted for consideration. The comments pertain only to condition 6 and are shown in bold type. For clarification, one modification is made as shown to Appendix A (attached).

- 6. During startup and shut down of the kiln, and during scheduled maintenance on the main baghouse, all of the emission limits stated in Condition 6 apply, except that emissions from the main stack-shall not exceed the following limits:
  - (a.) During <u>the startup</u> preheat prior to the feed introduction, the SO<sub>2</sub> emission limit for the main stack shall consist of compliance with the following work practices and fuel restrictions.
    - 1. Only natural gas is used as fuel. Appendix A shall be followed for heating a cold or warm kiln system and system conditioning after maintenance.
    - 2. Sulfur rings will be removed from the kiln prior to start up if the rings required the kiln to be shut down.
  - (b.) During preheat startup after the-introduction, of feed to the kiln, SO<sub>2</sub> emissions from the main stack shall not exceed 200 ppm corrected to 10% O<sub>2</sub> for a one hour average
  - (c.) Any shutdown of the kiln shall follow the normal rotation and cool down guideline in Appendix A to remove as much material from the kiln as possible without damaging system components.
  - (d.) At all times during During kiln startup, shutdown and scheduled maintenance, NOx emissions shall not exceed 1000 ppm corrected to 10% O<sub>2</sub> for a one hour average.

(e.) The Records of work practices, fuel restrictions, sulfur ring removal, and duration and dates of actions taken under Conditions 6(a.), (b.), (c.), and (d.) shall be logged as part of the Operations and Maintenance Plan and submitted as part of the monthly continuous monitoring reports. The cause, duration of cool down and kiln rotation schedule for shut down; the fuel used, date, start and end times for preheat; and the date and start and end times for startup shall be logged as part of the Operations and Maintenance Plan and submitted as part of the monthly continuous monitoring reports:

Appendix A to this order defines the startup, shutdown and scheduled maintenance conditions under which these alternate limits apply.

Please call should you have any questions.

16/11/2

Gerald J. Brown

Manager, Safety and Environmental

cc: HV

#### Appendix A

# Kiln Start Up/Shutdown and Maintenance Procedures

## KILN START UP - PREHEATING

- 1. Start the main baghouse.
- 2. Follow the designated preheating guidelines for increasing kiln temperature, decreasing oxygen and for kiln rotation.
- 3. Adjust the air flow and fuels to increase stage 5 exit temperature and decrease kiln inlet oxygen in accordance with the preheat guidelines.
- 4. Feed is added to the kiln when the 5<sup>th</sup> stage exit gas temperature is between 1,300 and 1,700 degrees F. Preheat ends with the addition introduction of feed to the kiln.

## KILN START UP - FEED ADDITION INTRODUCTION

- 1. When the kiln is prepared for feed as per the preheating guideline, start the kiln main drive and assure the ID fan is running at the appropriate speed..
- 2. After the kiln is on main drive, start the kiln feed at 75 tons per hour with sorbent added as necessary, to control sulfur dioxide emissions to below permit level.
- 3. Maintain the temperature of the material stream, increase the feed rate and adjust the draft and the fuel to achieve normal production levels.
- 4. Estimated START UP time: 24 hours following a successful initial feeding of the kiln as defined by #2 above.

#### KILN SHUT DOWN

- 1. Stop the feed, shut off the fuel and reduce the draft. For emergency shut downs, retain as much heat as possible in the kiln to ease restart after the cause of the emergency is corrected.
- 2. The kiln is rotated in accordance with the guidelines to prevent thermal warpage of the kiln shell and shock to the refractory that could cause failure of either. During these rotations feed material inside the kiln is discharged. All turns are to be made on the auxiliary drive and should be approximately 100 degrees of rotation.
- 3. Cooling air flow is adjusted after the fire is taken off the kiln. The temperature must be decreased in a manner protective of the kiln system and refractories.
- 4. If a situation such as a critical position of the kiln is encountered, heavy rains begin or similar event, the kiln may be rotated continuously for protection of the shell until the situation clears.
- 5. The baghouse will remain in operation.
- 6. A cool down period is required before entry is made into the kiln.

### MAIN BAGHOUSE MAINTENANCE PROCEDURES

### Monitoring Performance

- 1. Main Baghouse temperatures and pressures in the baghouse are continuously monitored by the control room while performance is checked by an opacity monitor on the kiln stack.
- 2. Condition of the baghouse components are inspected routinely to prevent failures during operation.

### Trouble shooting

- 1. Efforts to repair deficiencies will begin immediately upon detection.
- 2. Once a problem is identified and located, individual compartment(s) containing the defective equipment can be isolated for repairs without shutting down the entire baghouse.
- 3. Baghouse inlet and blow back dampers are closed and secured to isolate the compartment(s) containing the problem.
- 4. Compartment(s) doors are opened and the cell is allowed to cool for safe entry.
- 5. Once the repairs are completed, the compartment(s) is returned to operation.